

Claims:

I claim:

1. a laser pointer comprising:

of a laser module, a housing, a toggle switch a single-cell battery and a rotary cap and a safety protection plate, wherein:

the safety plate is used to block the laser beam during storage and transport and can easily be taken out before usage.

2. a laser pointer comprising

a single battery (AAA,N,L or similar types) with associated voltage conversion circuit (step up or step down) to provide power to the laser diode with fixed intensity of light and allow maximum usage of battery energy before its disposal/recharge.

Wherein:

2-a highly efficient DC to DC converter Circuit made from discrete components or Integrated circuits in Slim package or die form mounted on a PCB or similar assembly and housed in the laser housing described in claim 2. with an optional step down DC to DC step down converter for using small 6V-12 camera type batteries

2-b. a highly efficient circuit with 90% efficiency or over 95% in some variations of DC-DC converter chips or modules made of discrete electronic components or Integrated circuits or a hybrid module converting the battery voltage in claims 1., to appropriate value for driving the laser pointer diode where, it can work for inputs higher than 0.7 Volt.

2-c. fixed intensity output provided by claim 2., regardless of the dropped battery voltage after device operation and use, while utilizing maximum energy available from battery regardless of its life stage and of its reaching low level in voltage of 0.7 Volts.